SAMSUNG

REFRIGERATOR

ENGLISH

OWNER'S INSTRUCTIONS

Register your product at www.samsung.com/global/register

DA99-00299C REV(0.2)

FEATURES

Environmentally friendly refrigerator/freezer using R600a refrigerant and cyclopentane blowing agent.

- This product protects the environment by using R600a refrigerant and cyclopentane blowing agent.
- Properties:
  ODP (Ozone Depletion Potential): 0
  GWP (Global Warming Potential): Lowest

High-energy efficiency with twin cooling system

- Optimized power consumption with twin cooling system when using R600a/R134a and cyclopentane.

Fresh compartment

- This is suitable for storing dry or wrapped food (e.g. fresh salads, vegetables and fruit).

Fridge at the top, drawer-type freezer at the bottom

- The highly ergonomic vegetable compartment is placed at waist height for frequent use.
- The drawer-type freezer minimizes temperature variations and stores food cleanly and conveniently.

Digital temperature control display

- The display shows all functions of the appliance, allowing easy control.
- Refrigerator and freezer can be adjusted separately.

Quick Freeze

- Speeds up the freezing process in the freezer.

Quick Cool

- When you want to refrigerate the storage foods quickly.

Door alarm

- When the refrigerator door is left open for more than two minutes, a musical alarm is automatically triggered. This feature helps you save electricity and preserve stored foods.

Automatic defrosting in refrigerator/freezer

These operating instructions cover various models. The characteristics of your appliance may differ slightly from those described in this manual.

Either R600a or R134a are the refrigerants used. Check the compressor label on the rear of the appliance and the rating label inside the fridge to see which refrigerant is used for your refrigerator.

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WARNINGS / SAFETY PRECAUTIONS

To avoid any risk of personal injury, material damage or incorrect use of the appliance, be sure to observe the following safety precautions. (After reading these owner's instructions, please keep them in a safe place for reference.) Remember to hand them over to any subsequent owner.

Warning — **Indicates that a danger of death or serious injury exists.**	**Caution** — **Indicates that a risk of personal injury or material damage exists.**

Warning

Do not plug several appliances into the same socket.

- This could cause overheating and the risk of fire.

Keep the power plug away from the rear of the refrigerator/freezer.

- A damaged power plug may cause fire due to overheating.

Do not directly spray water inside or outside the refrigerator/freezer.

- There is a risk of fire or electric shock.

Do not spray inflammable gas near the refrigerator/freezer.

- There is a risk of explosion or fire.

Do not bend the power cord excessively or place heavy articles on it.
This constitutes a fire hazard. If the power cord is damaged, have it replaced immediately by the manufacturer, its service agent or a similarly qualified person.

Do not insert the power plug with wet hands.

- You may receive an electric shock.

Do not put a container filled with liquid on top of the appliance.

- If the water spills on to any electrical parts, it may lead to fire or electric shock.

Do not install the refrigerator/freezer in a damp place, where it could be splashed with water.

- Incorrect insulation of the electrical parts may cause an electric shock or fire.

Do not store volatile and inflammable substances in the refrigerator.

- The storage of benzene, thinner, alcohol, ether, LP gas or other such substances may cause an explosion.

Do not disassemble, repair or alter the appliance.

- It may cause fire or abnormal operations, which may lead to injury.

Pull the power plug out of the socket before replacing the interior light in the refrigerator.

- Otherwise, there is a risk of electric shock.

Be sure to earth the appliance.

- Otherwise, it may cause material damage or electric shock.

If you wish to dispose of the refrigerator/freezer, throw it away after removing the door or its seals.

- In this way, it is not possible for a child to remain trapped inside it.

This appliance contains a small amount of isobutane refrigerant (R600a), a natural gas with high environmental compatibility that is, however, also combustible. When transporting and installing the appliance, care should be taken to ensure that no parts of the refrigerating circuit are damaged.

Refrigerant squirting out of the pipes could ignite or cause an eye injury. If a leak is detected, avoid any naked flames or potential sources of ignition and air the room in which the appliance is standing for several minutes.

- In order to avoid the creation of a flammable gas-air mixture if a leak in the refrigerating circuit occurs, the size of the room in which the appliance may be sited depends on the amount of refrigerant used. The room must be $1m^3$ in size for every 8 g of R600a refrigerant inside the appliance. The amount of refrigerant in your particular appliance is shown on the identification plate inside the appliance.
- Never start up an appliance showing any signs of damage. If in doubt, consult your dealer.

Warning

- Keep ventilation openings in the appliance enclosure or mounting structure clear of obstruction.
- Do not use mechanical devices or any other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the refrigerator/freezer, unless they are of a type recommended by the manufacturer.

Caution

Do not store too much food in the appliance.

- When you open the door, an item may fall out and cause personal injury or material damage.

Do not put bottles or any kinds of glass in the freezer.

- The container may break and cause personal injury.

If the wall socket is loose, do not insert the power plug.

- It could be cause electric shock or fire.

Do not disconnect the power cord by pulling on it.

- You may disconnect a wire and cause a short circuit.

Do not store articles on top of the appliance.

- When you open or close the door, the articles may fall and cause personal injury or material damage.

Do not store pharmaceutical products, scientific materials or other temperature-sensitive products in the refrigerator.

- Products that require strict temperature controls must not be stored in the refrigerator.

Do not let a child hang from the door.

Do not touch any containers or food in the freezer with wet hands.

- It may cause frostbite.

Remove any foreign matter from the power plug pins.

- Otherwise there is a risk of fire.

Do not insert your hand into the bottom area of the appliance.

- Any sharp edges may cause personal injury.

After unplugging the appliance, wait for at least five minutes before plugging it in again to the wall socket.

- Abnormal operation of the freezer may cause material damage.

If the appliance is not to be used for a long period of time, pull out the power plug.

- Any deterioration in the insulation may cause fire.

Do not let children touch or play with the control panel on the front of the appliance.

- Do not allow children to play with this appliance.
- Do not stand or lean on the base panel, pull-out parts, doors and so on.
- Repairs and maintenance of the appliance should only be performed by a qualified technician. Incorrect repairs by an unqualified person are a potential source of danger that may have critical consequences for the user of the appliance.
- Never put ice cubes or ice lollies straight from the freezer into your mouth. (The low temperature may cause “freezer burns”.)

Caution

The refrigerant used in the refrigerator/freezer and the gases in the insulation material require special disposal procedures. Ensure that none of the pipes on the back of the appliance are damaged prior to disposal.

INSTALLING THE REFRIGERATOR/FREEZER

1 **Allow an adequate space and install the refrigerator/freezer on a firm, level floor.**
- If the appliance is not level, there may be unusual noises and poor cooling.
- Wait for at least one hour before plugging the appliance in.

2 **Clean the refrigerator/freezer.**
- Wipe and clean the appliance inside and outside with a damp cloth.

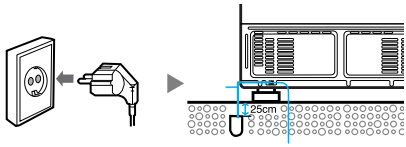
3 **Plug the refrigerator/freezer into a wall socket used exclusively by this appliance.**
- This appliance must be properly earthed.

4 **Place the food in the refrigerator/freezer.**
- It is recommended that you wait for the appliance to cool for 2-3 hours before storing food in it.

Warning

Use of an earthed socket exclusively for the appliance:
- If you are using a socket with an earthing terminal, you do not require a separate earthing connection.

Use of a non-earthed socket:
- Connect the “earthing wire” to the copper plate and bury it at a depth of at least 25 cm in the ground.

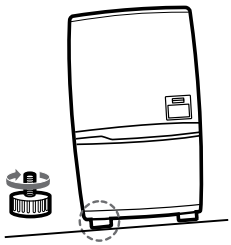


The appliance must be positioned so that the plug is accessible after installation.

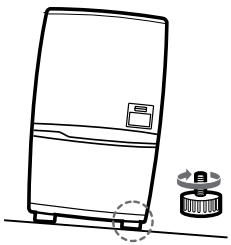
LEVELLING

If the front of the appliance is slightly higher than the rear, the door can be opened and closed more easily.

1 **The appliance tilts down to the left.**
Turn the left adjusting leg in the direction of the arrow with a flat head screwdriver until the appliance is level.



2 **The appliance tilts down to the right.**
Turn the right adjusting leg in the direction of the arrow with a flat head screwdriver until the appliance is level.



PREPARING THE REFRIGERATOR / FREEZER

To prepare your appliance for use and check that it is running correctly, take the following steps.

1 Install all shelves and compartments removed during transport in the correct positions.

2 You are advised to clean the appliance and accessories before switching the appliance on for the first time to remove any dust that accumulated during packing and shipping.
Please clean the water tank with an edible detergent, especially if there is an odor.

3 Switch on the appliance for approximately 2 hours before loading it with frozen food for the first time. Do not load with frozen food until the temperature of freezer shows at least -18°C.
If you want to store frozen food as rapidly as possible, set the temperature control to the coldest temperature (-25°C) and let the appliance operate for one hour.
The appliance is preset for normal operation. We recommend temperatures of +3°C in the refrigerator and -19°C in the freezer.

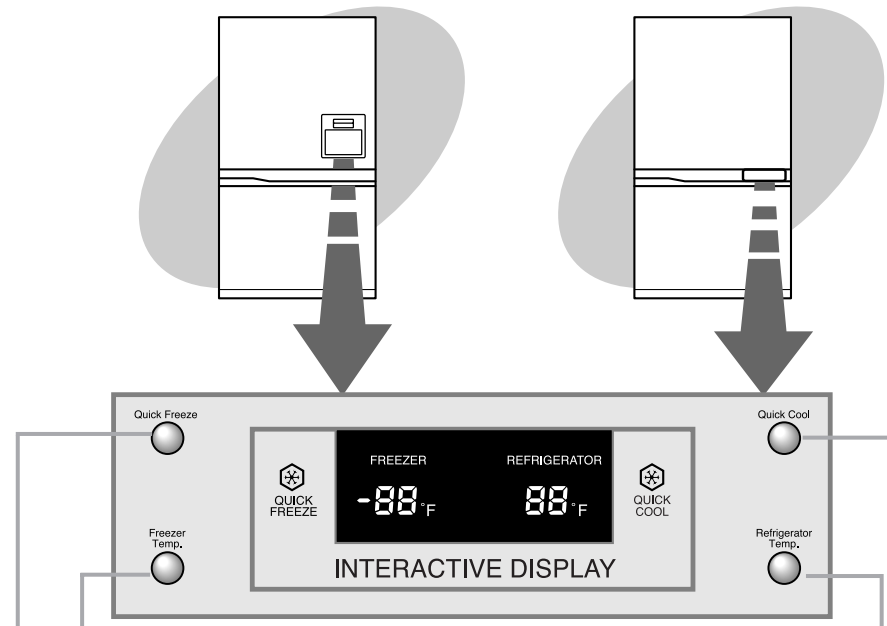
4 The interior light of the appliance will light up when the door is open.

5 Your appliance is operated by a compressor which switches “on and off” to maintain the internal temperature. When the compressor is new, it requires running in for a period of up to five months. During this period, it may be slightly noisy. This is quite normal and does not represent a fault.

6 Store food once the temperature in the refrigerator is sufficiently low. It takes a few hours after starting the refrigerator to reach the proper temperature.

If the appliance does not operate correctly, check the electricity supply. If the problem persists, contact your dealer.

USING THE CONTROL FEATURES



FREEZER TEMPERATURE BUTTON
Sets the freezer temperature.
Press the button repeatedly to change the temperature in sequence between -14°C and -25°C.

REFRIGERATOR TEMPERATURE BUTTON
Sets the refrigerator temperature.
Press the button repeatedly to change the temperature in sequence between 7°C and 1°C.

QUICK FREEZE BUTTON
Speeds up the freezing process in the freezer.

QUICK COOL
When you want to refrigerate the storage foods quickly.

CONTROLLING THE FREEZER AND REFRIGERATOR TEMPERATURES

Freezer

- The freezer can be set to a temperature between -14°C and -25°C.
- Press the **FREEZER TEMP.** button **repeatedly** until the required temperature is shown in the temperature display.
- The temperature display changes in sequence between -14°C and -25°C. When the display reaches -25°C, it returns to -14°C.
- After five seconds, the display reverts to the average freezer temperature, which changes as the freezer reaches the new temperature.

Refrigerator

- The refrigerator can be set to a temperature between 7°C and 1°C.
- Press the **REFRIGERATOR TEMP.** button **repeatedly** until the required temperature is shown in the temperature display.
- The temperature display changes in sequence and reverts to the average temperature in the same way as the freezer.

Temperature Display
Displays the current and selected freezer temperatures.

Freezer Display
Indicates that you are setting the freezer temperature or have opened the freezer door.

Temperature Display
Displays the current and selected refrigerator temperatures.

Refrigerator Display
Indicates that you are setting the refrigerator temperature or have opened the refrigerator door.

INDICATORS

Quick Freeze

- This light switches on when you press the QUICK FREEZE button.
- Press the button again to cancel the Quick Freeze mode. The freezer automatically switches back to the normal control mode after 2.5 hours.

Quick Cool

- Indication lamp of QUICK COOL lights up, and the temperature returns to the initial set degree when the storage foods are cooled to the extent of the desired temperature, or after the Quick Refrigeration is operated for 2 and half hours.

Temperature display

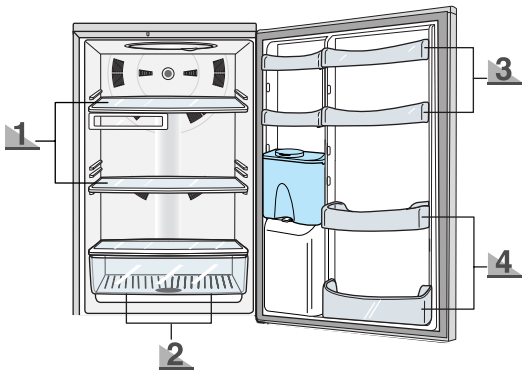
- The temperatures displayed for the freezer and refrigerator are the actual temperatures of each compartment when starting up for the first time or when the door is open.
- There may be little difference between the set temperature and the actual temperature.

STORING FOOD IN THE REFRIGERATOR OR FREEZER

When storing food in the appliance, follow the recommendations below.

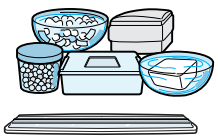
- Allow warm food and beverages to cool down before storing them in the appliance.
- Ensure that food is well-wrapped or covered before it is stored. This will prevent food from dehydrating, deteriorating in colour or losing flavour and will help maintain freshness. Fruit, vegetables and salads need not be wrapped, provided that they are stored in the refrigerator vegetable compartments. You are advised not to wrap the food with paper and store it in the refrigerator and freezer. It could be the cause of odor generation.
- Never let any oil or grease come into contact with the plastic fittings or door seals, as these materials easily become porous.
- Never store any explosive substances inside the appliance. High-proof alcohol should only be stored upright in tightly sealed containers.
- Please keep the space between shelf and the rear wall of the enclosed space of the cabinet 10mm apart for air circulation.

A. Refrigerator



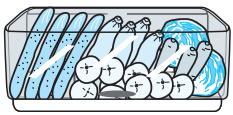
1 Transparent, unbreakable shelf

- Place food in storage containers and lay the items out at suitable intervals.
- The storage shelf is made from an unbreakable, transparent material, so that you can use it safely.



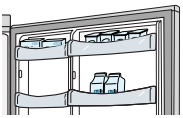
2 Fresh salad drawer

- Fruit and Vegetables can be stored in this compartment.
- It is possible to remove the drawer if you need more space to store fruit and vegetables.



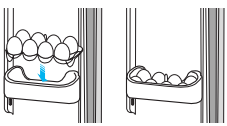
3 Multi-purpose guard and egg tray

- The refrigerator is warmest at the front, at the top and in the door.
- Store small packaged foods, like milk, yogurt and beverages here.



Egg tray

- Put eggs into the egg tray as shown in the figure and store the tray in a convenient place in one of the multi-purpose guards.



4 Bottle guard

- Store small bottles and (1 litre) cartons of beer, milk and juice in the upper area and large bottles and (1.5 litre) cartons in the lower area.

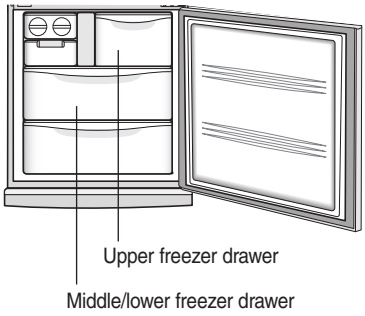
B. Freezer

Upper freezer drawer

• Store packed frozen foods, like ice cream and bacon.

Middle/lower freezer drawer

• Store fresh meat and fish or dried foods divided into suitably sized portions.



Wrapping food

Note

Pack the food in suitably sized portions for your household.
Vegetable and fruit portions should be no heavier than 1 kg, while meat portions can be up to 2.5 kg.
Smaller portions freeze through more quickly and the quality is thereby maintained better when defrosting and preparing the food.
It is important to seal food in airtight bags or containers before freezing to prevent it from losing its taste or dehydrating.
Wrap the food, press out any air and seal it airtight.

Suitable wrapping materials:

Plastic bags, cling-film, aluminium foil and freezer containers. These items are available from any dealer.

Unsuitable wrapping materials:

Wrapping paper, greaseproof paper, cellophane, bin bags or used carrier bags.
These can cause odors to be generated.

Suitable sealing materials:

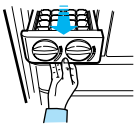
Rubber bands, plastic clips, string, freezer tape or similar.
Plastic film and bags may be heat-sealed using a special sealing iron or press.

Before placing a package in the freezer, it should be clearly labelled with the contents and date of freezing.

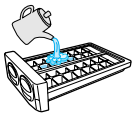
MAKING ICE

ICE CUBE MAKER

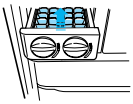
1 **Pull out the ice-cube maker.**



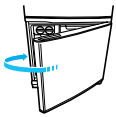
2 **Pour water in up to the water level mark (arrow).**
(Not to use hot water)



3 **Put the ice-cube maker back in position.**



4 **Close the freezer door.**



Warning

Danger of explosion

- The coldest parts of the refrigerator are the rear panel and the lowest shelf. This is the best place to store delicate foodstuffs.
- Glass bottles containing liquids that can freeze should never be stored in the freezer as the glass will explode when the contents freeze.

Note

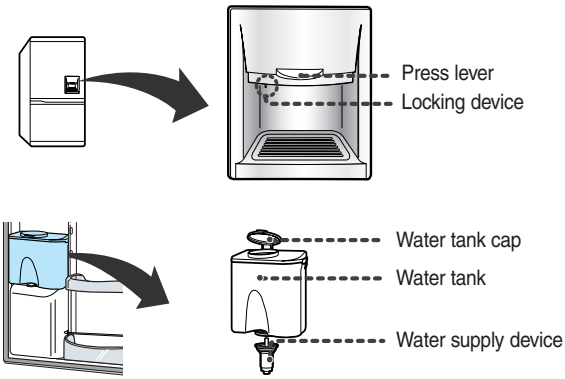
Making ice quickly

To make a large quantity of ice quickly, press the “QUICK FREEZE” button to select the fast freeze function.

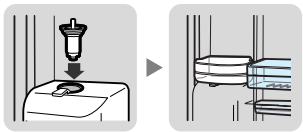
USING THE WATER DISPENSER (OPTIONAL)

You can easily obtain chilled water with the water dispenser without opening the refrigerator door. In addition, you can save electricity by reducing the number of times the door is opened by more than 30%.

Overview



WHEN THE WATER DISPENSER IS NOT IN USE, THE FOLLOWING IS RECOMMENDED



1 **Fix the water supply device tightly into the fixing hole.**
- The door will not close automatically when the water supply device is pulled out for a long time due to the leakage of cold air.

2 **Place a spare beverage bottle by the exclusive water tank.**
- Two 1.5 litre bottles can be used.

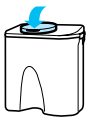
3 **Set the locking device to the "LOCK".**
- When pressing the "PUSH" button with the water supply device only fixed at the fixing hole, and the locking device is set on "OPEN", the water supply device can be removed from the fixing hole and cold leaks.

Note

When exposing to child, set the locking device to the "LOCK".

FILLING THE WATER TANK

1 **Open the water tank by removing the round cap and fill it with drinking water. (Do not use hot water.)**
- Fill the tank up to the full level (just below 4.2 litres).

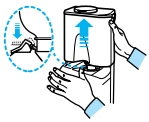


2 **Replace the round cap by pushing down on it until it clicks into place.**

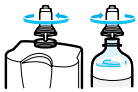
3 **Place a cup on the cup support, then press the "PRESS" lever.**

INSTALLING A REGULAR BOTTLE

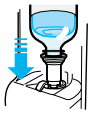
1 **Press the fixing lever, lift the exclusive water tank upwards, then remove it.**



2 **Remove the water supply device from the exclusive water tank, then set the inner groove of the water supply device in a regular spring water bottle and fix it in position by turning it.**



3 **Turn the water supply device over and then fix it in position in the hole.**



Note

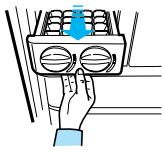
- Gurgling sounds may be heard when air enters the water tank from regular mineral water or beverage bottles.
- Some regular mineral water or beverage bottles may not fit the water supply device, depending on their size.
- If water does not come out satisfactorily when you press the “press” button, press it again.
- Do not use carbonated drinks, such as cola, cider or sodas. When you press the button, the beverage may spurt out due to the pressure of carbonic gas accumulated in the upper part of beverage bottle.
- Use bottled mineral water or boiled tap water that does not contain any particles.

REMOVING AND CLEANING ACCESSORIES

Before cleaning the appliance, you must always switch it off and unplug it from the wall socket. Do not use a steam cleaner. Hot steam could damage the surface of the appliance or the electrical components, with a risk of electric shock.

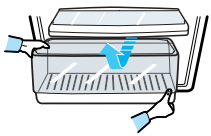
1 Ice cube maker

- Place a hand in the lower groove, then pull the ice cube maker forward.
- Remove the ice cube maker and rinse it in water.



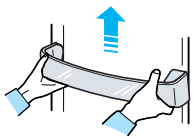
2 Fresh salad drawer

- Pull the super high-humidity salad drawer out as far as it will go, then remove it by lifting it slightly and pulling it towards you.
- Wipe it with a damp cloth.



3 Bottle guard

- Hold the bottle guard in both hands, then remove it by lifting it slightly and pulling it towards you.
- Wash it in water.

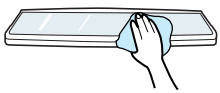


4 Freezer drawer

- Holding the freezer drawer in both hands, pull it out as far as it will go, then remove it by lifting it up slightly and pulling it towards you.
- Wipe it with a damp cloth.

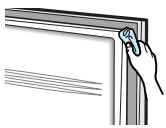
5 Transparent, unbreakable shelf

- Remove the shelf, then clean it using water and detergent.
- When replacing the shelves, do not mix up the top, middle and bottom shelves.



6 Rubber seals

- Clean the rubber seals with a damp cloth and detergent. Use a wooden skewer wrapped in a small cloth to clean in the grooves.



CLEANING THE WATER DISPENSER

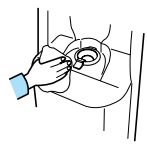
Dispenser Tray

1 Using the dispenser tray handle, pull the dispenser tray right out.

2 Empty the water in the dispenser tray, then clean it using warm water and detergent.

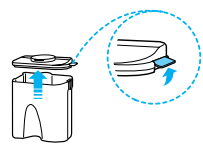
Connection path

Wipe over the connection path and surrounding area with a clean damp cloth.



Water Tank / Supply Device

1 **Pull upward and disassemble the hooks on both sides of the large-sized cap.**

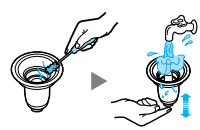


2 **Loosen the water supply device by turning it in the direction of the arrow and removing it.**

3 **Wipe the large-sized cap and the exclusive water tank with warm water and detergent.**

- Hold the cap and pull it upwards to remove it. Clean the cap and waste filtering bottle attached to the cap with a soft brush.

4 **After cleaning the water supply device with a soft brush, press the water supply device operation lever, then wash it in running water.**



Caution

- Clean the water tank frequently if it is used to dispense tea or other such beverages. Only use filtered tea. For better hygiene, beverages with a high sugar content (juice, soft drinks) are not recommended.
- Deposits can be cleaned by wiping the tank with a cloth dampened in vinegar or salt water.
- Check that the rubber seal on the water supply device has not slipped off or is not damaged by a sharp-edged object. Otherwise, it may leak.

REPLACING INTERIOR LIGHTS

INDOOR LAMP IN THE REFRIGERATOR

Always unplug the appliance when replacing the refrigerator light. Otherwise, there is the danger of electric shock.

1 **Unscrew the cover with a philips-head screwdriver.**

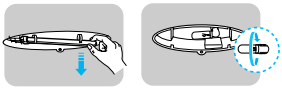
2

- Fluorescent light

• Remove the interior light by pulling it downward, then replace it with a new one.

- Incandescent light

• Turn the interior light to pull it out and replace it with a new one.



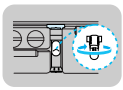
3 **Screw the cover back with a philips-head screwdriver.**

INDOOR LAMP IN THE FREEZER

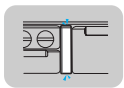
1 Raise the hanging sill under the indoor lamp cover upward by pressing on it.

2 Replace the indoor lamp with a new lamp after removing it by turning it in the direction of arrow.

• Watt and voltage must agree with the details on the type plate.



3 Insert the lower hanging sill after fitting the upper part of the indoor lamp cover.



PROBLEMS AND SOLUTIONS

The appliance is not operating at all or the temperature is too high

- Check that the power plug is correctly connected.
- Is the temperature control on the front panel correctly set?
- Does sun shine on the appliance or are there heat sources nearby?
- Is the back of the appliance too near to the wall?

The food in the refrigerator is frozen

- Is the temperature control on the front panel set to the coldest temperature?
- Is the surrounding temperature too low?
- Did you put food with a high water content in the refrigerator?

There are unusual noises

- Check that the appliance is installed on a stable, level floor.
- Is the back of the appliance too near to the wall?
- Have any foreign objects fallen behind or under the appliance?
- Is the noise coming from the compressor in the appliance?
- A ticking sound may be heard inside the appliance; this is normal. This sound occurs when the various accessories contract or expand.

The front corners and sides of the appliance are warm and condensation starts to form

- Heat-proof pipes are installed in the front corners of the appliance to prevent condensation from forming. When the surrounding temperature rises, this may not always be effective. However, this is not abnormal.
- In very humid weather, condensation may form on the outer surface of the appliance when moisture in the air comes into contact with the cool surface of the appliance.

You can hear a liquid bubbling in the appliance

- Please note that noises caused by the refrigerant circuit cannot be avoided.

There is a bad smell inside the appliance

- Do not wrap food with paper.
- Store foods covered and clean the cold inlet.

There is a layer of frost on the surface of stored food.

- Space the food out as much as possible to improve ventilation.
- Is the door fully closed?

Condensation forms on the inside wall of the appliance and around vegetables

- Food with a high water content is stored uncovered with a high humidity level or the door has been left open for a long time.
- Store the food with a cover or in sealed containers.

USAGE PRECAUTIONS

Store food with a high water content at the front of a refrigerator shelf.

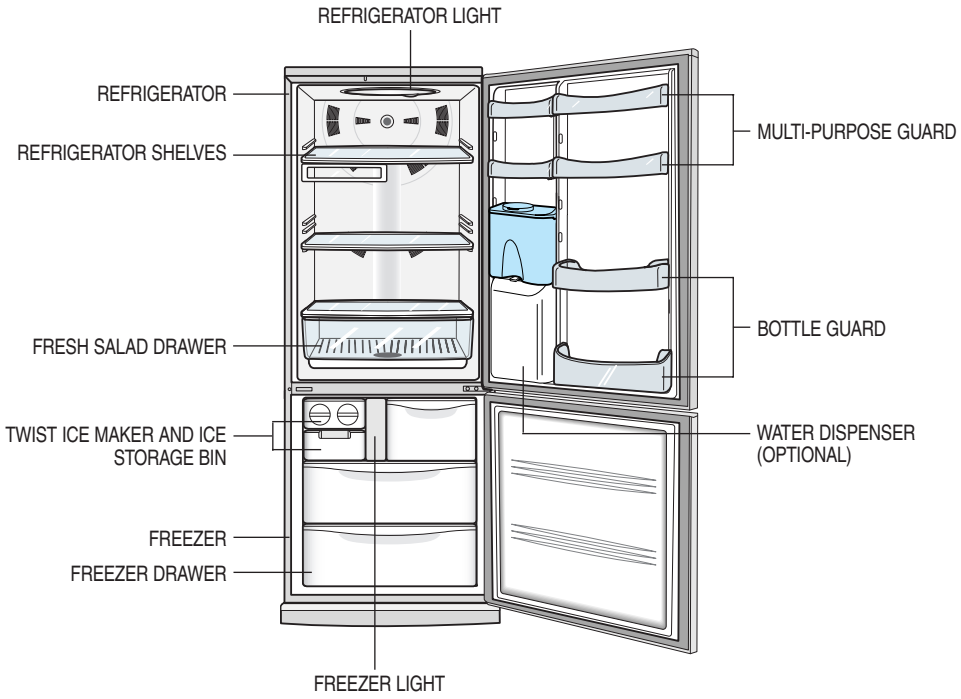
Store hot food in the appliance only after it has cooled.

- If you store cold food, you save on electricity and improve refrigeration.

Power Saving Tips

- Install the appliance in a cool, dry room with adequate ventilation.
  Ensure that it is not exposed to direct sunlight and never put it near a direct source of heat (radiator, for example).
- Never block any vents or grilles on the appliance.
- Allow warm food to cool down before placing it in the appliance.
- Put frozen food in the refrigerator to thaw.
  You can then use the low temperatures of the frozen products to cool food in the refrigerator.
- Defrost the freezer when ice builds up. A thick coat of ice will impair the transfer of cold to the frozen products, thereby increasing power consumption.
- Do not keep the door of the appliance open for too long when putting food in or taking food out.
  The shorter time the door is opened, the less ice will form in the freezer.
- When freezing food or storing it in the freezer, place the food directly on the freezer elements in the top container.

VIEW OF YOUR REFRIGERATOR / FREEZER



MEMO

MEMO

Ambient Room Temperature Limits

This refrigerator/freezer is designed to operate in ambient temperatures specified by its temperature class marked on the rating plate.

Temperature Class	Symbol	Ambient Temperature	
		Maximum	Minimum
Extended Temperate	SN	32°C (90°F)	10°C (50°F)
Temperate	N	32°C (90°F)	16°C (61°F)
Subtropical	ST	38°C (100°F)	18°C (64°F)
Tropical	T	43°C (109°F)	18°C (64°F)

NOTE: Internal temperatures may be affected by such factors as the location of the refrigerator/freezer, ambient temperature and the frequency with which you open the door. Adjust the temperature as required to compensate for these factors.

SAMSUNG